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subsequent search query.

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## **Listing of Claims**

This listing of claims replaces all prior versions and listings of claims in the application:

Claims 1-28. (Canceled).

29. (New) A method comprising:

estimating a breadth of a search query;

identifying user interaction with a first document in a result set that is responsive to the search query;

changing a ranking of a popularity of the first document based at least in part on the user interaction with the first document and the breadth of the search query, wherein an amount of the change in the ranking of the popularity decreases with increased breadth of the search query; and making the rank of the popularity of the first document available for responding to a

- 30. (New) The method of claim 29, wherein estimating the breadth of the search query comprises estimating the breadth based on a total number of documents in a result set that is responsive to the search query.
- 31. (New) The method of claim 29, wherein estimating the breadth of the search query comprises estimating the breadth of the search query based on differences in relevances of documents in the result set.
- 32. (New) The method of claim 29, wherein estimating the breadth of the search query comprises comparing rates at which the documents in the result set are retrieved.

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33. (New) The method of claim 29, wherein ranking the popularity of the first document comprises weighting the user interaction with the first document based on the breadth of the search query.

- 34. (New) The method of claim 33, wherein ranking the popularity of the first document further comprises adding the weighted user interaction to a popularity database configured to store measures of a popularity of documents.
- 35. (New) The method of claim 29, wherein identifying user interaction with the first document comprises determining a click count for the first document.
- 36. (New) The method of claim 29, wherein identifying user interaction with the first document comprises determining a click-through ratio for the first document.
- 37. (New) The method of claim 29, wherein identifying the user interaction with the first document comprises identifying the user interaction independent of a search query.
- 38. (New) The method of claim 29, further comprising responding to a subsequent search query based at least in part on the rank of the popularity of the first document.
- 39. (New) The method of claim 38, wherein responding to the subsequent search query comprises adjusting a ranking of documents in the response to the subsequent search query based at least in part on the rank of the popularity of the first document.
- 40. (New) The method of claim 29, wherein changing the ranking of the popularity of the first document comprising increasing the ranking of the popularity of the first document.

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41. (New) An article comprising one or more machine-readable media storing instructions operable to cause one or more machines to perform operations comprising: estimating a breadth of a search query;

identifying user interaction with a first document in a result set that is responsive to the search query;

changing a ranking of a popularity of the first document based at least in part on the user interaction with the first document and the breadth of the search query, wherein an amount of the change in the ranking of the popularity decreases with increased breadth of the search query; and making the rank of the popularity of the first document available for responding to a subsequent search query.

- 42. (New) The article of claim 41, wherein estimating the breadth of the search query comprises estimating the breadth based on a total number of documents in a result set that is responsive to the search query.
- 43. (New) The article of claim 41, wherein estimating the breadth of the search query comprises estimating the breadth of the search query based on differences in relevances of documents in the result set.
- 44. (New) The article of claim 41, wherein estimating the breadth of the search query comprises comparing rates at which the documents in the result set are retrieved.
- 45. (New) The article of claim 41, wherein ranking the popularity of the first document comprises weighting the user interaction with the first document based on the breadth of the search query.

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46. (New) The article of claim 45, wherein ranking the popularity of the first document further comprises adding the weighted user interaction to a popularity database configured to store measures of a popularity of documents.

- 47. (New) The article of claim 41, wherein identifying user interaction with the first document comprises determining a click count for the first document.
- 48. (New) The article of claim 41, wherein identifying user interaction with the first document comprises determining a click-through ratio for the first document.
- 49. (New) The article of claim 41, wherein identifying the user interaction with the first document comprises identifying the user interaction independent of a search query.
- 50. (New) The article of claim 41, further comprising responding to a subsequent search query based at least in part on the rank of the popularity of the first document.
- 51. (New) The article of claim 50, wherein responding to the subsequent search query comprises adjusting a ranking of documents in the response to the subsequent search query based at least in part on the rank of the popularity of the first document.
- 52. (New) The article of claim 50, wherein changing the ranking of the popularity of the first document comprising increasing the ranking of the popularity of the first document.